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09/703,025	10/31/2000	Yoshiaki Nakamura	00783/LH	9053

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EXAMINER	
YE, LIN	

ART UNIT	PAPER NUMBER
2612	3

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/703,025	NAKAMURA ET AL.	
	Examiner	Art Unit	
	Lin Ye	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/5/01*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,3-4, 15 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Bell et al. U.S. Patent 6,486,915 (Hereinafter refer as Bell).

Referring to claim 1, the Bell reference discloses in Figures 1-3, A photosensor system comprising a photosensor array (imager 108) constituted by two dimensionally arraying a plurality of photosensors (photocells 112) (see Col. 3, lines 20-45), image reading means (e.g., final optimal exposure setting for taking a picture) for reading a subject image at a predetermined reading sensitivity (integration or accumulation time) by the photosensor array (See col. 3, lines 63-67); pre-reading means (exposure settings) for reading the subject image prior to image reading operation while changing an image reading sensitivity of the photosensor array at a plurality of stages (steps) as shown in Figure 3; optimal reading sensitivity extraction means (searching optimal exposure) for extracting an optimal image reading sensitivity suitable for the image reading operation on the basis of a predetermined measurement amount relating to an image pattern of the subject image read by said pre-reading means; and reading sensitivity setting means for setting the optimal image reading

sensitivity to a reading sensitivity of said image reading means (See Col. 7, lines 5-10 and Col. 8, lines 17-30).

Referring to claim 3, the Bell reference discloses wherein the predetermined measurement amount in said reading sensitivity extraction means is lightness data (illumination level) corresponding to the image pattern (histogram mean) of the subject image read by pre-reading operation (See Col. 6, lines 45-55).

Referring to claim 4, the Bell reference discloses wherein the image reading sensitivity of the photosensor array is set by adjusting a charge accumulating (integrating) period of the photosensor as shown in Figure 3.

Referring to claim 15, the Bell reference discloses all subject matter as discussed with respected to same comment as with claim 1.

Referring to claim 17, the Bell reference discloses all subject matter as discussed with respected to same comment as with claim 3.

Referring to claim 18, the Bell reference discloses all subject matter as discussed with respected to same comment as with claim 4.

3. Claims 1-9, 14-20 and 25 (Application No. 09703025, Hereinafter referred to as '025) are **provisionally rejected under 35 U.S.C. 102(e)** as being anticipated by copending Application No. 09695624 (Hereinafter referred to as '624) which has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e), if published under 35 U.S.C. 122(b) or patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future publication or patenting of the copending application. It

is critical that patents issuing from these applications be commonly owned to avoid potential licensees from owing license fees to two different parties.

This provisional rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. This rejection may not be overcome by the filing of a terminal disclaimer. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

Referring to the '025 claim 1, the '624 reference discloses in Figures 3-7, a photosensor system comprising a photosensor array constituted by two dimensionally arraying a plurality of photosensors, image reading means for reading a subject image at a predetermined reading sensitivity by the photosensor array: pre-reading means for reading the subject image prior to image reading operation while changing an image reading sensitivity of the photosensor array at a plurality of stages (See specification of '624, page 22, lines 18-27 and page 23, lines 1-15); optimal reading sensitivity extraction means for extracting an optimal image reading sensitivity (e.g., the optimal image reading sensitivity having a maximum absolute difference value among absolute difference values between adjacent pixels) suitable for the image reading operation on the basis of a predetermined measurement amount relating to an image pattern of the subject image read by said pre-reading means; and reading sensitivity setting means for setting the optimal image reading sensitivity to a reading sensitivity of said image reading means (See specification of '624, page 27, lines 25-27 and page 28, lines 1-5).

Referring to the '025 claim 2, the '624 reference discloses wherein said reading by the image reading means is executed by setting different image reading sensitivities stepwise for respective rows of the photosensor array and reading the subject image as shown in Figure 4 (See specification of '624, page 23, lines 5-11).

Referring to the '025 claim 3, the '624 reference discloses wherein the predetermined measurement amount in said reading sensitivity extraction means is lightness data corresponding to the image pattern of the subject image read by pre-reading operation (See specification of '624, page 23, lines 5-11).

Referring to the '025 claim 4, the '624 reference discloses wherein the image reading sensitivity of the photosensor array is set by adjusting a charge accumulating period of the photosensor as shown Figure 7B (See specification of '624, page 28, lines 6-15).

Referring to the '025 claim 5, the '624 reference discloses wherein which further comprises, in said image reading means and said pre-reading means in the photosensor array, effective voltage adjustment means for applying to each photosensor a correction signal for setting to optimal values effective voltages of signal voltages applied to the each photosensor as shown in Figs 17A-H (See specification of '624, page 43, lines 1-3).

Referring to the '025 claim 6, the '624 reference discloses wherein said reading sensitivity extraction means comprises: measurement amount comparison means for extracting maximum and minimum values of the measurement amount relating to the image pattern of the subject image for each image reading sensitivity on the basis of the subject image read by pre-reading operation; dynamic range calculation means for calculating a dynamic range of the measurement amount on the basis of the maximum and minimum

values of the measurement amount extracted for each image reading sensitivity; and maximum dynamic range extraction means for extracting an image reading sensitivity having a maximum dynamic range among dynamic ranges of measurement amounts calculated for each image reading sensitivity as shown in Figures 10-11 (See specification of '624, page 31, lines 1-16).

Referring to the '025 claim 7, the '624 reference discloses wherein said measurement amount comparison means extracts the maximum and minimum values of the measurement amount in a predetermined column range of each row (See specification of '624, page 32, lines 1-15).

Referring to the '025 claim 8, the '624 reference discloses wherein said reading sensitivity extraction means comprises: displacement calculation means for calculating a displacement (e.g., difference value between adjacent pixels) of the measurement amount relating to the image pattern of the subject image between image reading sensitivities on the basis of the subject image read by pre-reading operation; and maximum displacement extraction means for extracting an image reading sensitivity having a maximum displacement among displacements of measurement amounts between image reading sensitivities (See specification of '624, page 30, lines 7-27).

Referring to the '025 claim 9, the '624 reference discloses wherein the displacement calculation means calculates a differentiated value of the measurement amount on predetermined columns of each row as shown in Figure 5A (e.g. difference value between adjacent columns of pixels of each row, see specification of '624, page 23, lines 11-15).

Referring to the '025 claim 14, the '624 reference discloses wherein each photosensor has a source electrode and drain electrode formed via a channel region made from a semiconductor layer, and a top gate electrode and bottom gate electrode formed at least on and below the channel region via insulating films, either of the top gate electrode and bottom gate electrode is used as a light irradiation side, and charges corresponding to a light quantity irradiated from the light irradiation side are generated and accumulated in the channel region (See specification of '624, page 2, lines 14-27 and page 3, lines 7-15).

Referring to the '025 claim 15, the '624 reference discloses all subject matter as discussed with respected to same comment as with claim 1.

Referring to the '025 claim 16, the '624 reference discloses all subject matter as discussed with respected to same comment as with claim 2.

Referring to the '025 claim 17, the '624 reference discloses all subject matter as discussed with respected to same comment as with claim 3.

Referring to the '025 claim 18, the '624 reference discloses all subject matter as discussed with respected to same comment as with claim 4.

Referring to the '025 claim 19, the '624 reference discloses all subject matter as discussed with respected to same comment as with claim 6.

Referring to the '025 claim 20, the '624 reference discloses all subject matter as discussed with respected to same comment as with claim 8.

Referring to the '025 claim 25, the '624 reference discloses all subject matter as discussed with respected to same comment as with claim 14.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ormum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims **1-5, 14-18 and 25** (Application No. 09703025, Hereinafter referred to as '025) provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1-4, 7-12, and 16** of copending Application No. 09695624 (Hereinafter referred to as '624). Although the conflicting claims are not identical, they are not patentably distinct from each other

This is a provisional obviousness-type double patenting rejection.

Relative to both claims 1, the '025 claim 1 is a broader recitation of the same invention claimed in '624 claim 1. Therefore, '025 claim 1 is encompassed by '624 claim 1. It is critical that patents issuing from these applications be commonly owned to avoid potential licensees from owing license fees to two different parties.

Referring to claims 2 of both '025 and '624 are the same invention.

Referring to claims 3 of both '025 and '624 are the same invention.

Referring to claims 4 of both '025 and '624 are the same invention.

Referring to claims 5 and 15 of '025 is a broader recitation of the same invention claimed in '624 claim 7.

Referring to claim 14 of '025 is the same invention claimed in '624 claim 8.

Referring to claims 15 of '025 is a broader recitation of the same invention claimed in '624 claim 9. Therefore, '025 claim 15 is encompassed by '624 claim 9. It is critical that patents issuing from these applications be commonly owned to avoid potential licensees from owing license fees to two different parties.

Referring to claim 16 of '025 and claim 10 of '624 are same invention.

Referring to claim 17 of '025 and claim 11 of '624 are same invention.

Referring to claim 18 of '025 and claim 12 of '624 are same invention.

Referring to claim 25 of '025 is a broader recitation of the same invention claimed in '624 claims 8 and 16.

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

   A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. Claims **1-25** (Application No. 09703025, Hereinafter referred to as '025) are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims **1-2, 7-20, and 25-33** of copending **Application No. 10013979**. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

   a. Smith U.S. Pub. 2002/0021827, discloses a system and method of capturing an acceptable fingerprint image.

   b. Komiya et al. U.S. 4,119,988 discloses an exposure control circuit of an input device controls the accumulating circuit so as to enable the subject to be photographed under the best condition.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lin Ye** whose telephone number is **(703) 305-3250**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Lin Ye
March 17, 2004